Assembly of the pivot assembly of UAZ vehicles
Spicer bridge

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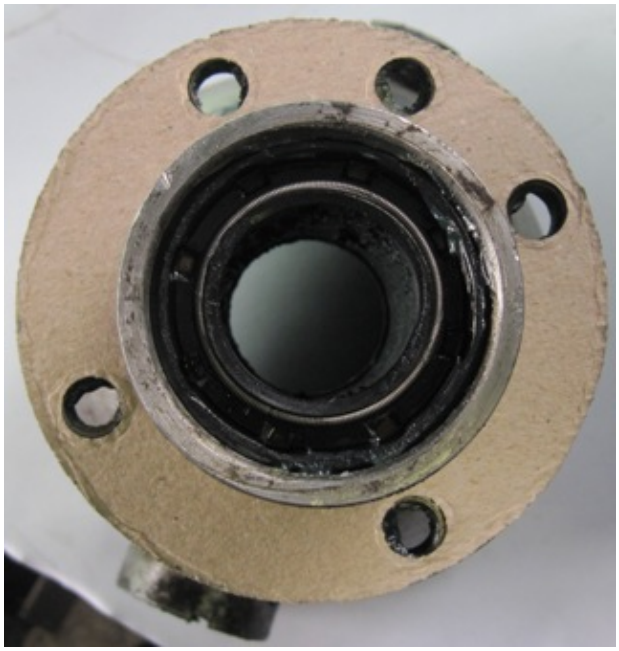
Step 13. Installing new inserts

Required tool:

Cuff 32x50-10 with spring assembly, 2 pcs.; Inserts (plastic or bronze), 4 pcs.; Ball bearing gasket (cat. no. 31-0121238), 2 pcs.; CV joint-4M; Cold welding;

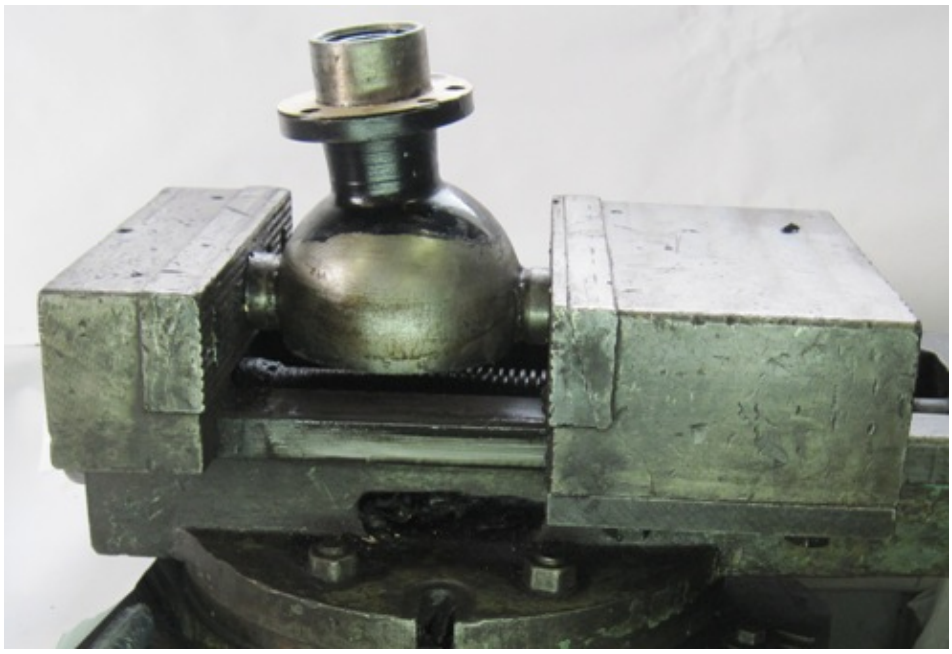
We install a new half-axle sleeve in the ball bearing. Orientation of the cuff is carried out by the sealing spring - it should stand on the side of the main gear gearbox (i.e., when installing the spring should "look" at you). Install the

gasket on the end of the ball bearing.



In cases where there is a slight wear or deformation of the pivot support along the inner hemisphere, it is allowed to use composite materials to fill the damaged areas. In this case, it is necessary to install the pins and inserts without waiting for the polymerization of the composition.

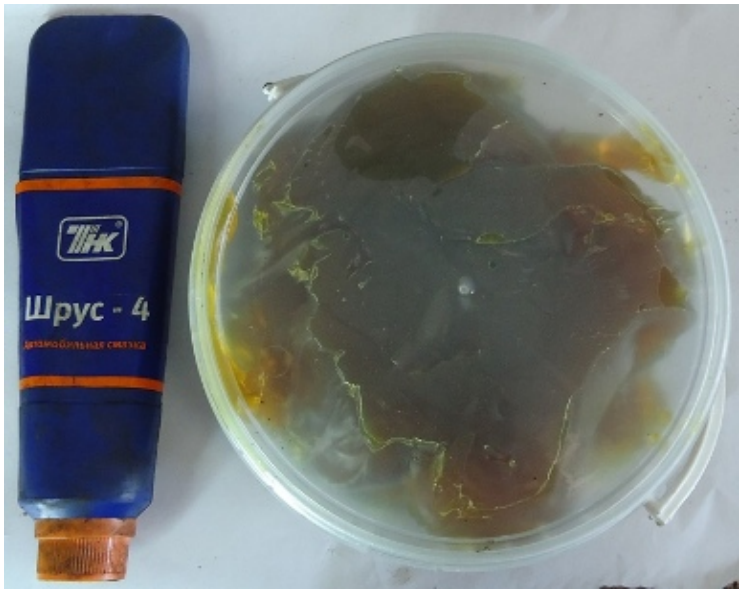
We install new inserts (plastic or bronze) in the pivot supports on the ball bearing and apply SHRUS-4M grease to the inner surface of the inserts.



up

Step 14. Assembling the steering knuckle

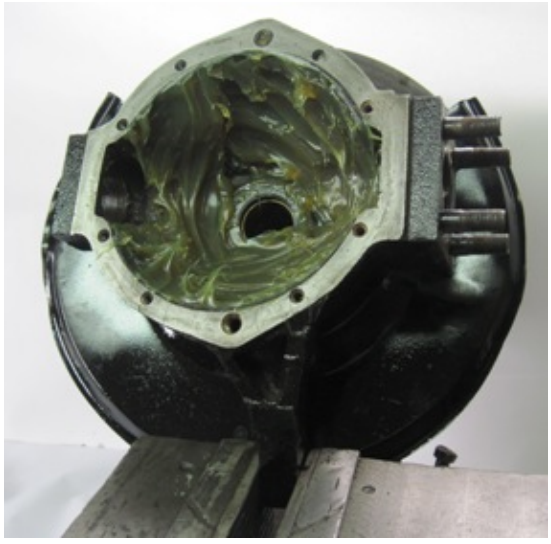
Required tool:



Litol-24, 0.5 kg per side; CV joint-4M, 50-75 grams;

We install new thrust washers of the rotary knuckle joint in the ball bearing and the rotary knuckle body.

Before assembling, we apply Litol-24 grease, about 0.5 kg, to the inner surfaces of the steering knuckle and ball bearing housing

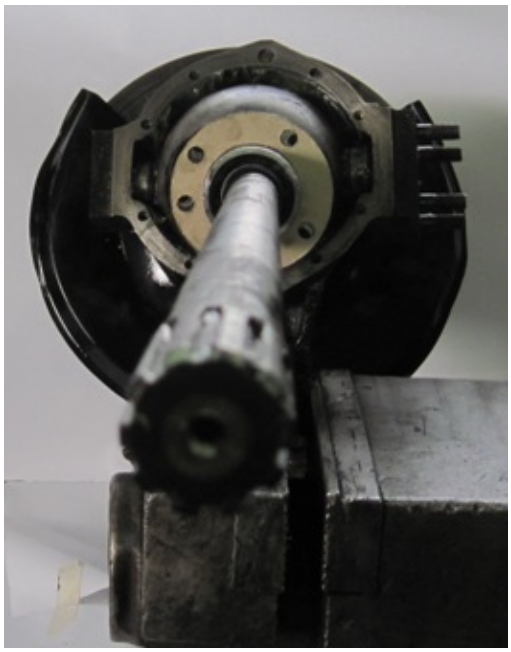


and we insert a semi-axis with a hinge of equal angular velocities, on which a joint-4M up to 100 grams is applied.

up

Step 15. Installing the ball bearing

We put a ball bearing on the semi-axis, while making sure that its orientation is correct.
The bottom of the ball bearing is determined very simply: on the flange on the lower side-three holes, on the upper - two. We recommend that you notice the orientation of the rotary knuckle housings during disassembly, for example, by drilling or painting.
We pay attention to this, since the node is assembled in any combination and you can easily make a mistake.



up

Step 16. Lubrication of the pins

Required tool:

Shkvorni; SHRUS-4M to 30 grams";

Lubricate the conical surface and thread of the clamping sleeve, the rubbing surfaces of the pin with SHRUS-4M grease

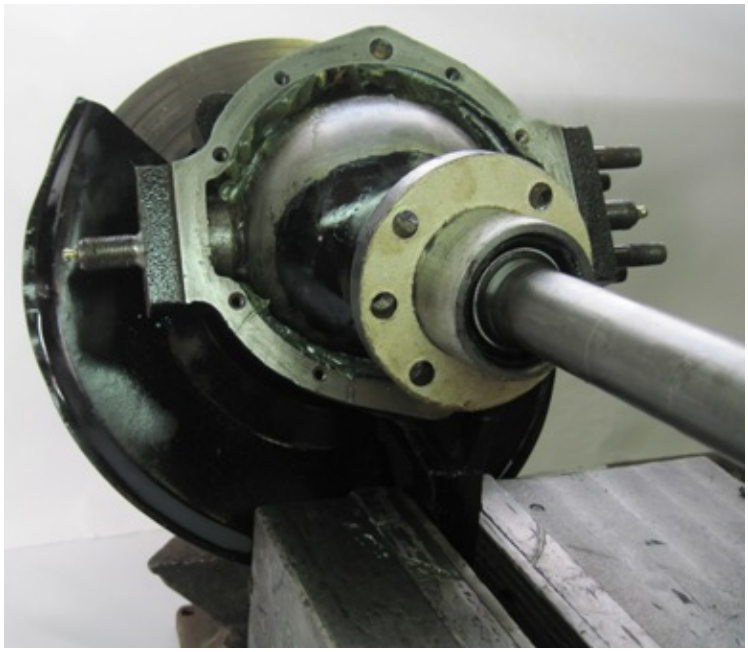
up

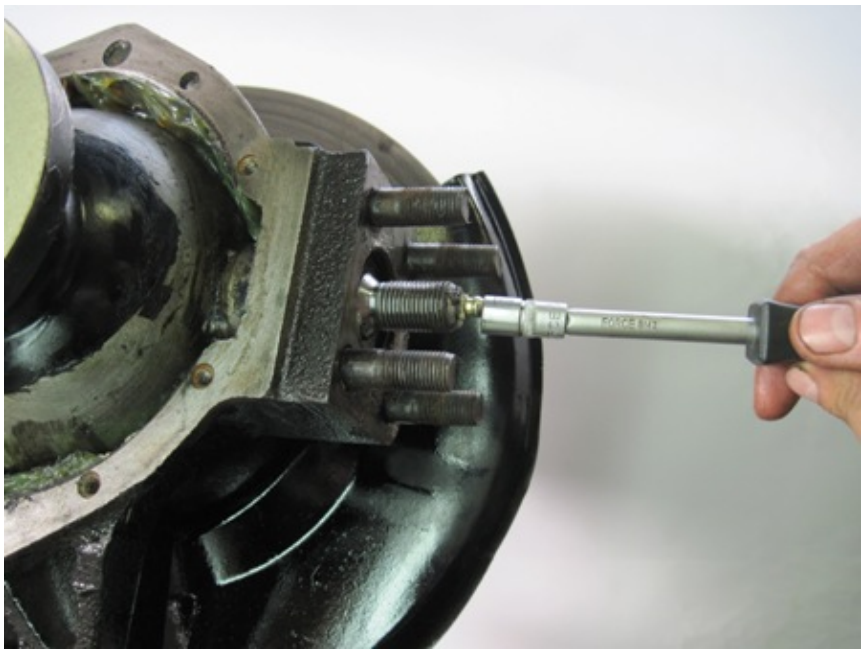
Step 17. Tightening the clamping bushings

Required tool:

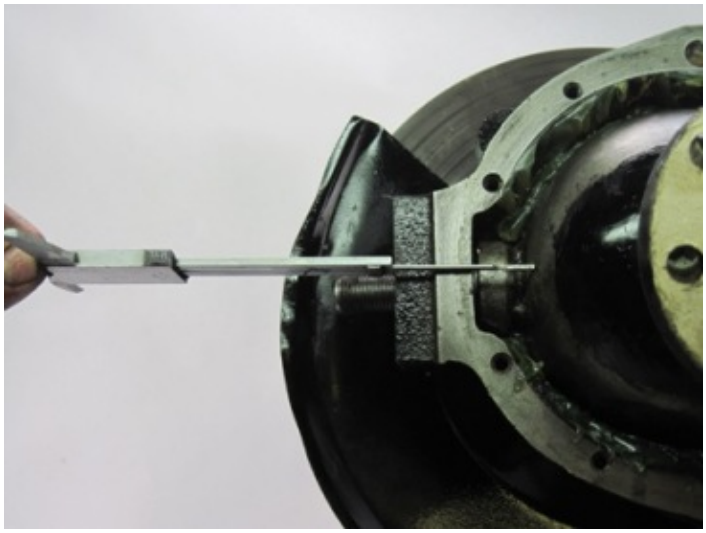
Key pivot; Head for 27; Torque wrench up to 30 kgf * m; Soft (copper or aluminum) mandrel; Hammer; Caliper;

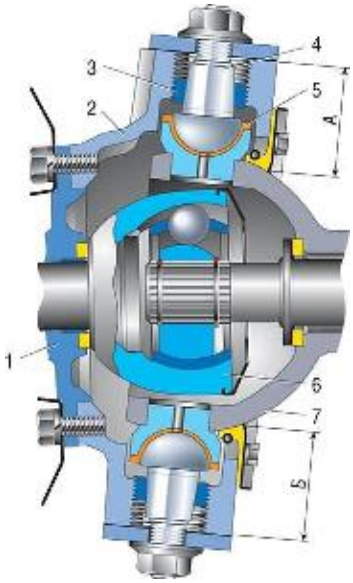
We insert the pins into the threaded holes of the steering knuckle housing and wrap the clamping bushings until the pins stop in the supports. If you have installed pivots with a channel for lubrication, then for further work it is necessary to unscrew the press oilers from them with the key "on 8"





The body of the rotary knuckle is centered relative to the ball bearing with an accuracy of 0.2 mm from the ends of the inflows of the body of the rotary knuckle, using a pivot key with a head "on 27"





1-Trunnion;
2-Rotary knuckle housing;
3-Expansion sleeve;
4-Pin;
5-Insert;
6-Joint of equal angular velocities;
7-Ball bearing;
A and B are Controlled dimensions, A=B

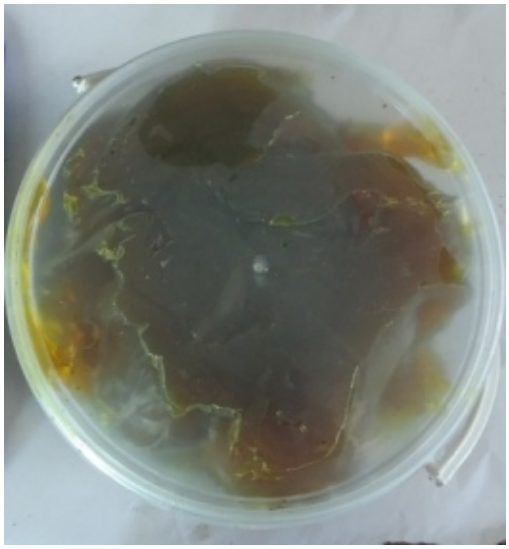
Alternately increasing the torque by 2-3 kgf * m, using **instant key** (*periodically checking the symmetry relative to the ends, the deviation should not exceed 0.2 mm.*), tighten the clamping bushings to a final torque of 20-25 kgf*m.
When the torque of the clamping sleeve is increased sequentially each time through **soft mandrel** strike with a hammer (video fragment) along the axis of the pivots on both sides.
It is necessary to ensure the accuracy of the symmetry of the ball bearing installation of 0.2 mm, relative to the ends of the inflows of the steering knuckle body.
Make measurements using **vernier calipers**.
This centering is necessary for correct operation of the semi-axle seals and reducing the load on the hinges of equal angular velocities.

Please note that after tightening the clamping bushings with a force of 25 kgf * m, the ball bearing rotates very tightly relative to the steering knuckle body, as it should. The turning force is adjusted separately - by tightening the nuts of the pins (step 22).

up

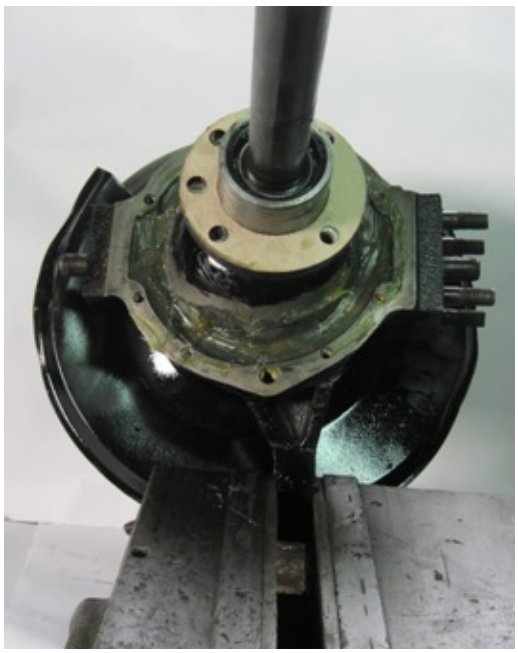
Step 18. Mounting the clip and knuckle cuffs

Required tool:

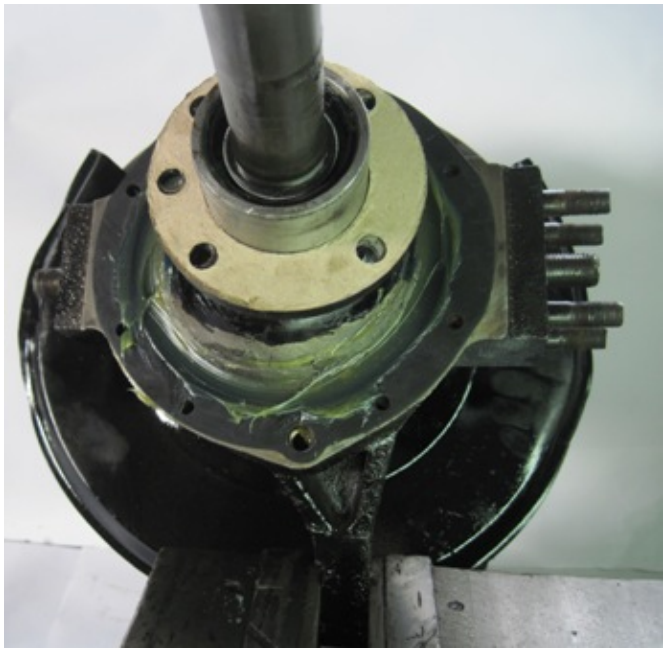


Litol-24, 100 grams; Head for 10

In the cavity between the ball bearing and the body of the rotary knuckle, we fill Litol-24.



Then we install the cuff of the steering knuckle..



We install a felt ring (ring SP134-12-5), which must be pre-soaked with engine oil.

We install the clip of the cuff of the rotary fist

Using the "10" head, we screw it onto eight M6x12 bolts

up

Step 19. Adjusting the locking bolt stop

Required tool:

Key for 12, 14, 17; Caliper with depth gauge (columbic);

We screw in the locking bolt-stop with a locknut, set the previously measured height on the caliper and fix it with a key " on 17 "and a key"on 12".

We turn the M10x1x16 bolt with a 14 "key.

up

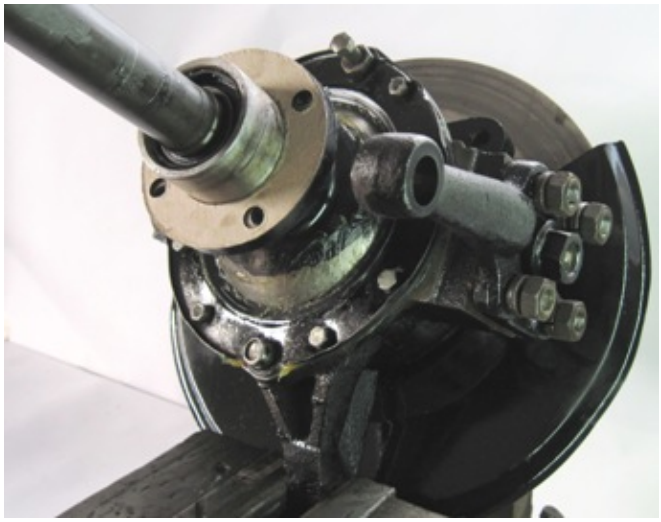
Step 20. Installing the pad and knuckle lever

Required tool:

Head for 19; Gasket for the pin pad (cat. no. 3160-2304028), 3 pcs. ; Gasket for the rotary lever (cat. no. 3160-2304029), 1 pc.

Install the gasket, cover plate and screw the nut M16x1. 5 with a flange on the pin.

We install the gasket and the knuckle lever, the expansion bushings and fasten them to four Ml2x1. 25 nuts using the "19" head and screw the M16x1. 5 nut with a flange on the pin. This photo shows a variant of the steering knuckle lever for UAZ-374195 cars and its modifications



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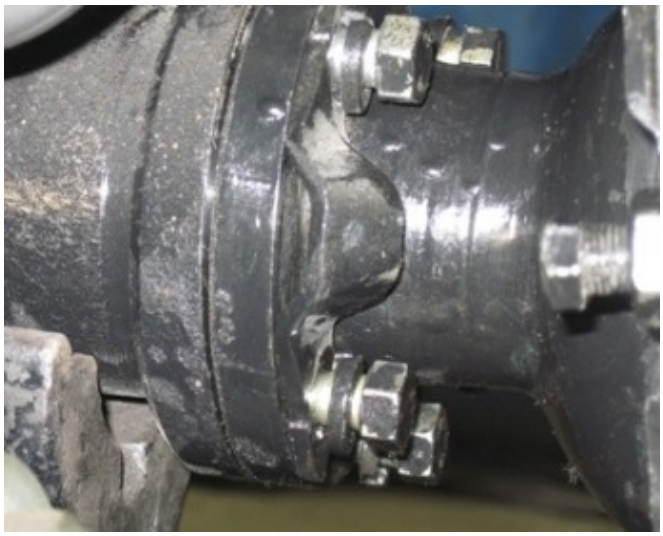
Step 21. Installing a half-axle steering knuckle

Required tool:

Key for 14

We turn the steering knuckle with the half-axis to the flange of the half-axis casing on five special bolts Ml0x1x30, two of them having previously put on the turn limiters, with the key "on 14" until it stops.

Attention: after running 200-500 kilometers, re-tighten the specified five special bolts Ml0x1x30



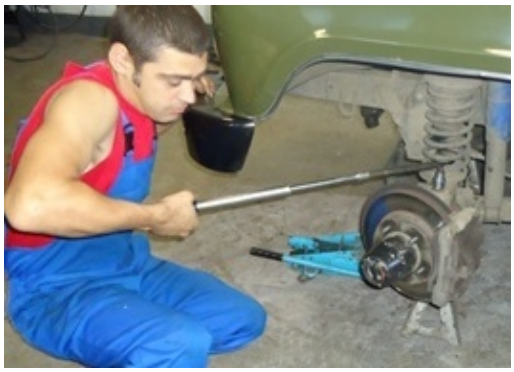
up

Step 22. Ball bearing adjustment

Required tool:

Head on 24

Pre-tighten the nuts M16x1. 5 with the flange head "to 24" with a torque of 5 kgf*m.
The torque of rotation of the ball bearing in any direction relative to the common axis of the pins must be within 1.0-2.5 kgf * m (video snippet), i.e., with your hands on the body of the steering knuckle, you must freely rotate it around the axis. If this does not happen, extend the M16x1.5 nuts with a flange on both sides until the desired result is achieved. The maximum tightening force is 15 kgf*m.



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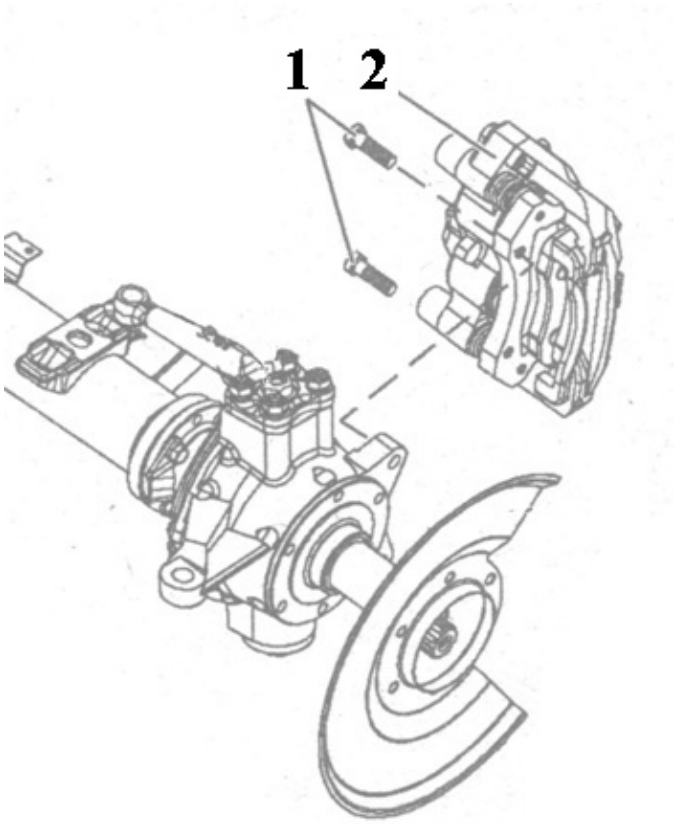
Step 23. Installing the brakes

Required tool:

Special head for 19; Key for 8



Installation diagram of brake mechanisms

We fasten the key "on 8" press oilers (if they are provided for by the design) on the pivot.

We fasten the fastenings of the brake mechanisms (2, figure) to the body of the steering knuckle with a special head "on 19" on the bolts (1, figure).

up

Step 24. Installing steering trapezoid rods

Required tool:

Key on 22; Screwdriver; Pasatizhi; Head on 22; Adjustable Cotter pins 3, 2x25 (cat. no. 258040-P29) steering nuts, 4 pcs.

Install the steering trapezoid rod tighten the fingers with the key "on 22" and zashplintovte nut M14x1. 5. Reuse of old cotter pins is not recommended.

Set the bipod rod to the knuckle lever, screw the fingers with the M14x1. 5 nut with a 22 "key and screw it in.

Install the wheel.

Attention! Before you start driving the car after the repair is completed, press the brake pedal several times to press the front caliper pads against the brake discs.